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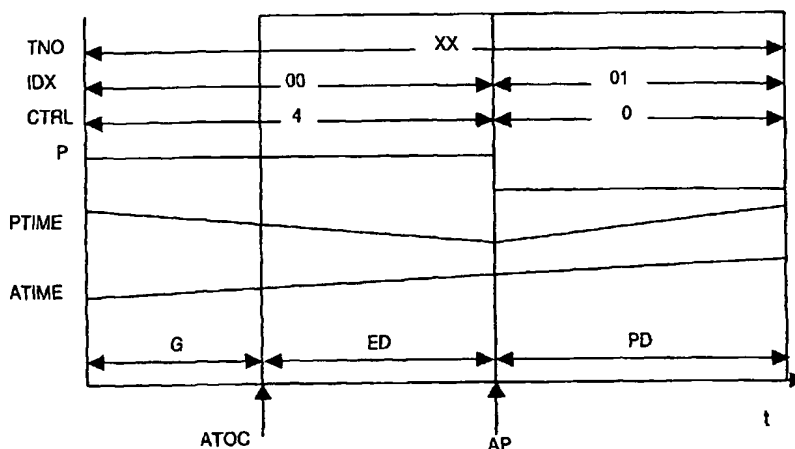
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- (74) Agents: **CROSS, James, P., A. et al.**; R.G.C. Jenkins & Co., 26 Caxton Street, London SW1H 0RJ (GB).
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- (71) Applicant (for all designated States except US): **FIRST 4 INTERNET Ltd** [GB/GB]; 6 South Bar Street, Banbury, Oxon OX16 9AA (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **MILES, Anthony, William** [GB/GB]; c/o First 4 Internet Ltd, 6 South Bar Street, Banbury, Oxon OX16 9AA (GB).
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[Continued on next page]

(54) Title: COPY PROTECTION SYSTEM FOR DATA CARRIERS



(57) Abstract: A data payload PD is recorded on a compact disc in a format including a lead-in indicating a track start address ATOC and a subchannel P which changes state at a payload start address AP, subsequent to the track start address ATOC. Data ED recorded at the track start address ATOC includes unrecoverable data. Where the data payload PD is an audio track, an audio-only player begins to search sequentially from the track start address ATOC until the subchannel changes state, and reproduces the audio track from that point. A data player, on the other hand, begins to reproduce data from the track start address ATOC. When the unrecoverable data is read, the read operation is aborted, as it appears that the data has been corrupted. This operation cannot be easily circumvented, because it is not normally acceptable to ignore corrupt CD-ROM data. The disc may also include a second session containing an encrypted version of the data payload PD, where each sector is encrypted using a different key which is derived from a sector address by an algorithm and requires a special player program which performs the decryption. A supervisory program prevents circumvention of the copy protection.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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INTERNATIONAL SEARCH REPORT

Intern Application No

PCT/GB 03/01006

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/74053 A (DILLA LTD C ; EDWARDS ROGER (GB)) 7 December 2000 (2000-12-07) abstract page 2, line 16 - line 22 page 2, line 30 - line 35 page 3, line 6 - line 13 page 5, line 31 - page 6, line 9 page 6, line 29 - page 7, line 2 page 8, line 10 - line 16	1,5,9,10
A	figure 5	2-4,6-8
X	US 2001/018743 A1 (MORISHITA TAKUYA) 30 August 2001 (2001-08-30) abstract paragraph '0002! paragraph '0005! paragraph '0009! paragraph '0024! - paragraph '0030! paragraph '0037! paragraph '0047! paragraph '0060! paragraph '0063! - paragraph '0064!	11-13, 15-17, 20-25
A		14,18,19
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A	CDRINFO.COM: "Cactus Data Shield 200" WWW.CDRINFO.COM, 'Online! 26 January 2002 (2002-01-26), XP002261887 Retrieved from the Internet: URL:http://www.cdrinfo.com/Sections/Articles/PrinterFriendly.asp?ArticleHeadline=Cactus+Data+Shield+200> 'retrieved on 2003-11-18!	
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 03/01006

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/ GB 03 /01006

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-10

Use of unrecoverable data and misleading TOC information to prevent the playback of an audio signal from a CD medium when used in a CD-ROM drive. A subchannel is used to indicate a payload start position for a recoverable audio part in order to be able to play the audio track with an audio CD player.

2. claims: 11-25

Use of encryption for protecting data content on a CD medium. Data is segmented in sectors and each sector is encrypted with an encryption key derived from the logical sector adress LBA of the start of that sector.

3. claims: 26-35

Use of a memory resident supervisory program to restrict access to data on a CD when used in a CD-ROM drive. A command monitoring function intercepts commands sent by an application to the CD-ROM drive and determines whether the commands indicate an unauthorised activity.

INTERNATIONAL SEARCH REPORT

Information on patent family members

Intern Application No

PCT/GB 03/01006

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